

IN THE CLAIMS

Please cancel claims 12-28.

For the Examiner's convenience, a list of all claims are included below.

1. (Original) A method comprising;
depositing a first metal layer on a portion of a substrate;
depositing a dielectric layer upon the substrate such that the first metal layer is covered by the dielectric layer;
etching the dielectric layer to form a trench in the dielectric layer such that the first metal layer is exposed;
depositing a layer of ferroelectric polymer film on the substrate such that the trench is at least partially filled with a ferroelectric polymer film, the ferroelectric polymer film covering the first metal layer; and
depositing a second metal layer on the ferroelectric polymer film layer such that the ferroelectric polymer film is not substantially degraded.
2. (Original) The method of claim 1 wherein the method further comprises:
selectively depositing a diffusion barrier layer on the first metal layer prior to depositing the layer of ferroelectric polymer film.
3. (Original) The method of claim 2 wherein the diffusion barrier layer is a conductive material that adheres to the ferroelectric polymer film and does not interact with or outgas into the ferroelectric polymer.

4. (Original) The method of claim 2 wherein the diffusion barrier layer is selected from the group consisting of cobalt and nickel.
5. (Original) The method of claim 1 further comprising:
removing excess ferroelectric polymer film using a low-temperature process prior to depositing the second conductive layer such that the ferroelectric polymer film is not degraded.
6. (Original) The method of claim 5 wherein the low-temperature process is a low-temperature oxygen-based ash process.
7. (Original) The method of claim 1 wherein the ferroelectric polymer film is etched within a tolerance of less than or equal to 10% of a trench depth.
8. (Original) The method of claim 1 wherein the ferroelectric polymer film is confined within the trench and wherein the ferroelectric polymer film is bounded on the bottom by the first metal layer and bounded on the top by the second metal layer.
9. (Original) The method of claim 7 wherein the ferroelectric polymer film is deposited using a spin-coat process.
10. (Original) The method of claim 1 further comprising;

depositing a second diffusion barrier layer on the ferroelectric polymer film prior to depositing the second metal layer.

11. (Original) The method of claim 10 wherein the second diffusion barrier layer is deposited using an evaporation process.

12-28 (Canceled)